

## METHODS AND COMPOSITIONS FOR ISOLATION OF BIOLOGICAL MACROMOLECULES

### ABSTRACT OF THE DISCLOSURE

The present invention relates generally to compositions, methods and kits for use in clarification and viscosity reduction of biological samples. More specifically, the invention relates to such compositions, methods and kits that are useful in the isolation of biological macromolecules from cells (e.g., bacterial cells, animal cells, fungal cells, viruses, yeast cells or plant cells) via lysis and one or more additional isolation procedures, such as one or more filtration procedures. In particular, the invention relates to compositions, methods and kits wherein biological macromolecules are isolated using a filter, where the pore size increases in the direction of sample flow. The compositions, methods and kits of the invention are suitable for isolating a variety of forms of biological macromolecules from cells. The compositions, methods and kits of the invention are particularly well-suited for rapid isolation of nucleic acid molecules from bacterial cells.